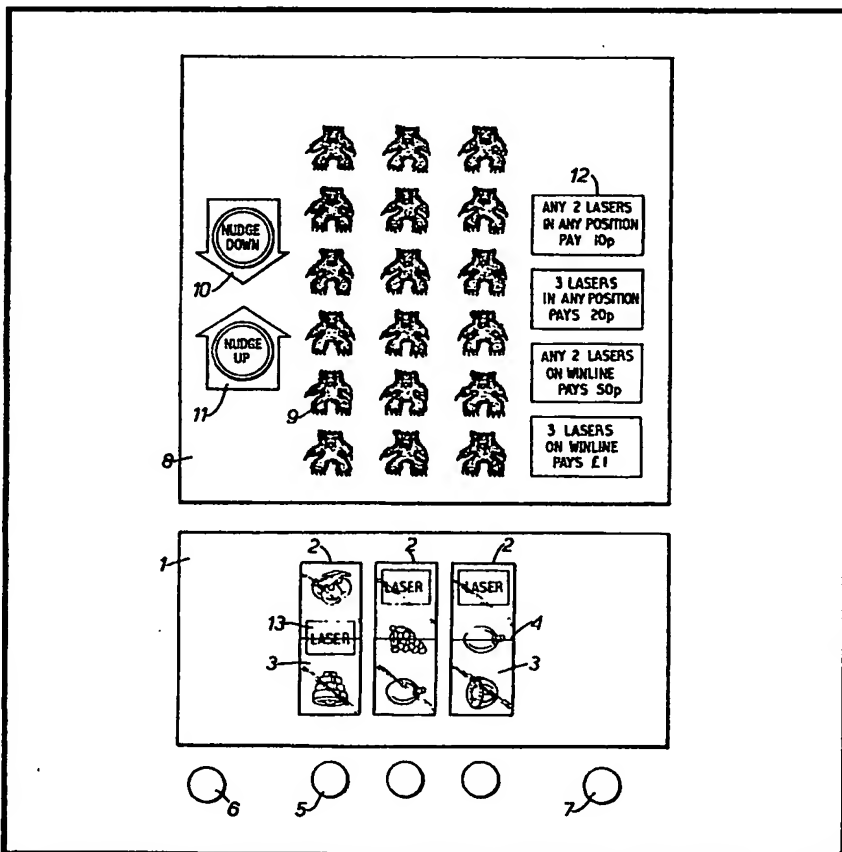


- (21) Application No **7937338**  
(22) Date of filing  
**27 Oct 1979**  
(43) Application published  
**28 May 1981**  
(51) **INT CL<sup>3</sup> G07F 17/34**  
(52) Domestic classification  
**G4V 118 AA**  
(56) Documents cited  
**None**  
(58) Field of search  
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**(54) Improvements relating to coin-operated or coin-free gaming or amusement machines**

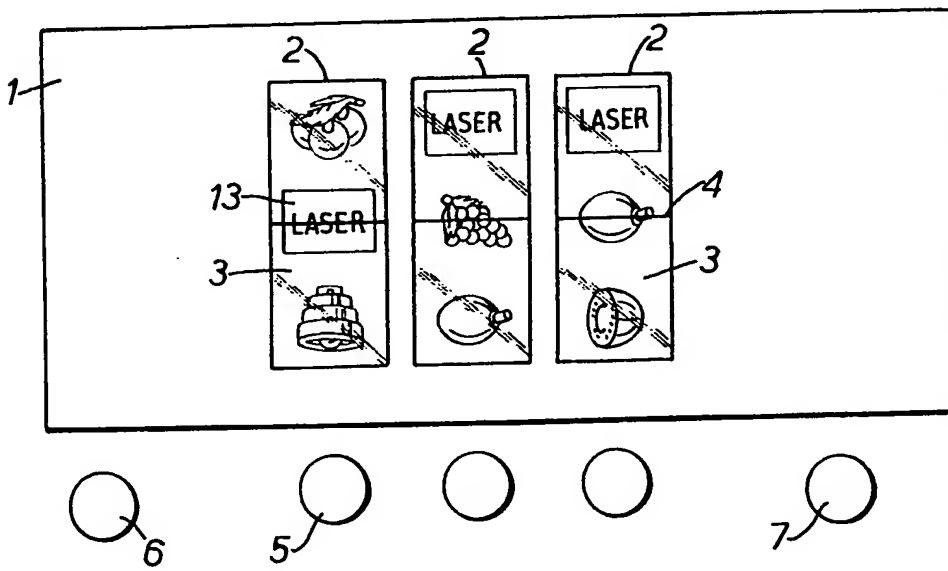
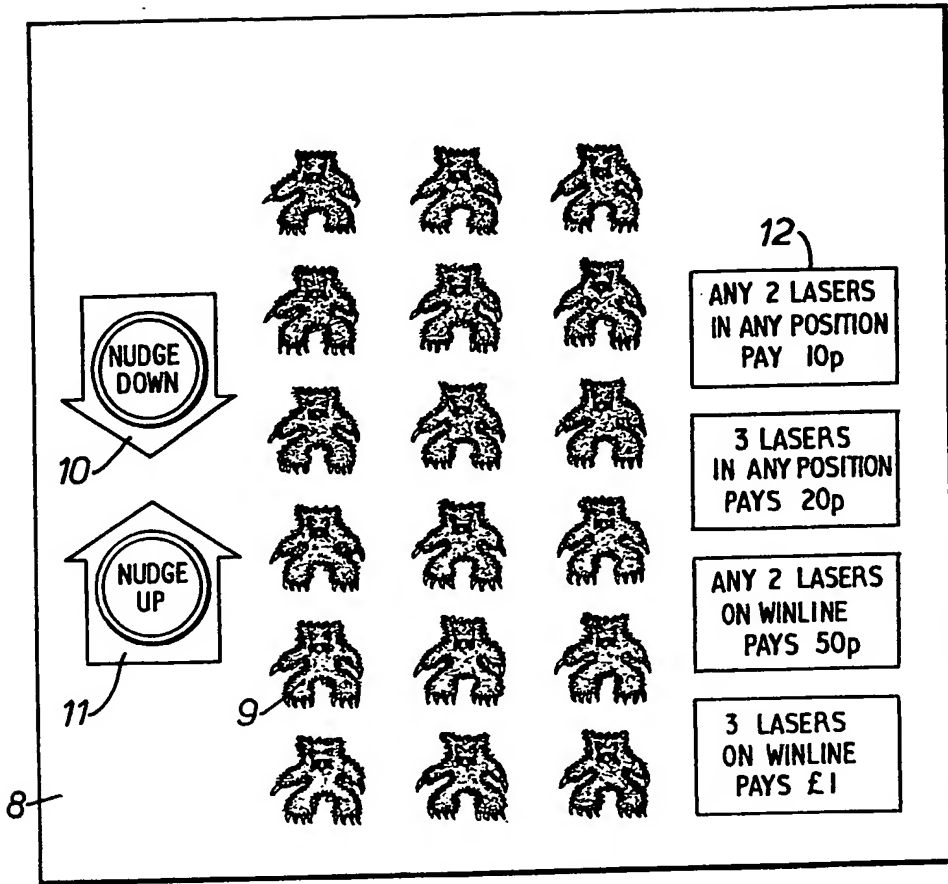
pulsing tone, increasing in frequency with the illumination advance.

(57) A fruit machine is provided with the usual drums (3) which can be spun to stop randomly with various symbol combinations showing on a win line (4). It further has a 'nudge' feature occasionally available by which each drum can be indexed forwards or backwards to bring different symbols onto the line. A separate panel indicator (8) has a column of symbols (9) for each drum, with means for illuminating the symbols in succession down each column. When a particular nudge feature is available the time allowed for nudging is determined by the preferably accelerating advance of the illumination through the associated column. The feature may be accompanied by a



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## SPECIFICATION

**Improvements relating to coin-operated or coin-freed gaming or amusement machines**

5 This invention relates to coin-operated or coin-freed gaming or amusement-with-prizes machines and the term 'coin' is intended in this specification to embrace tokens which can be used in substitution for normal money.

10 The invention is concerned with machines of the kind in which a series of symbols carried by rotatable drums, reels or discs or their equivalents (hereinafter referred to simply as drums) is displayed to view in a line, and in which when the machine is operated or played by the insertion of a coin, and possibly also by, for example, the depression of a lever or the pressing of a button, the drums rotate and stop in an apparently random manner, and if the symbols in the resulting line are in a winning combination, a pay-out mechanism is operated and a prize is awarded and indicated. It is further concerned with such machines, which have a "nudge" feature, wherein at least one drum, when stationary, displays at least two symbols and the combination line is distinguished from the array of symbols that is then visible; and wherein when the feature is randomly available, an adjustment can be made to the combination line by indexing one or more of the drums or their equivalents to bring different symbols into the combination line and thereby possibly make a winning combination. Such machines are hereinafter referred to as being of the kind defined.

Nudging has become a very popular feature and it is the aim of this invention to introduce even more variety and excitement into such machines using nudging as a basis.

According to the present invention there is provided a coin-operated or coin-freed gaming or amusement-with-prizes machine of the kind defined, wherein each drum capable of being nudged has associated therewith, on separate indicator means, a series of separately distinguishable symbols, and wherein when a particular nudge feature is randomly available the separate distinguishing of these symbols is progressed through each series, nudging of the associated drum being possible only during such progress.

Generally the distinguishing of the indicator symbols will be by illumination and preferably the currently distinguished symbol will flash. Those previously distinguished may have steady illumination or none at all, while those still to be distinguished will remain unlit. The occurrence of this particular feature may be further indicated by a pulsing tone.

Each progress along a series of symbols will preferably be at a non-uniform rate increasing throughout at least a substantial part of the progress. The pulsing tone may have a frequency related to this rate.

Generally all the drums will have such associated series but progress through them will not necessarily be at the same rate. Thus the player is advised to nudge the drum with the quickest associated series first, and then move on to the other drums. The machine may also offer a selection for nudging the drums in either direction.

70 There can also be a nudge feature independent of the particular one but the latter will preferably take precedence over any other similar feature. These special symbols may generate different prizes according to the number and arrangement of such symbols finally displayed, not necessarily on the combination line.

75 It can be arranged that progress through any one series will be stopped and further nudging of the associated drum prevented when one of the special drum symbols on that drum appears on the combination line.

80 There can also be a nudge feature independent of the particular one but the latter will preferably take precedence over any other feature. Alternatively, the particular feature may be the sole feature offering nudging, and prizes may then be awarded or not according to the same principles as apply during normal or non-feature play.

85 For a better understanding of the invention one embodiment will now be described, by way of example, with reference to the accompanying drawing in which the single Figure is a diagram of the display of a machine according to the invention.

100 The display has a first lower panel 1 in which there are three windows 2 through which parts of the peripheries of drums 3 can be seen. These peripheries are illustrated in the conventional manner with fruit or other symbols and when stopped there is a central line 4 of such symbols above and below which there can be seen further lines. In normal play various combinations of symbols on the combination line 4 can generate prizes.

The machine has a nudge facility and associated with each drum there is a button 5 which, when the feature is available, can move the associated drum so that a symbol previously showing but not on the combination line moves onto that line. They can also double as hold buttons. Buttons 6 and 7 are start and cancel buttons.

110 A second, upper display panel 8 has, aligned with each window 2, a vertical series or column of symbols 9. In this example these symbols are all identical and each represents a monster, although other symbols, not necessarily all the same, could serve equally well. They can be progressively illuminated from the top downwards by lights behind the panel, which will be translucent. This panel 8 also has two illuminated buttons 10, 11 which are selectively pressed when a nudge

feature is available according to which direction the player wants to index the drums.

There are also sub-panels 12 indicating the prizes that can be won when the particular

5 feature associated with the symbols 9 is available. Each drum has one special symbol 13 although there could be more. Here it is simply the word "Laser" in a rectangle, and it is particularly associated with this feature.

10 In use, the machine can be played (as many other fruit machines) by the insertion of a coin and the depression of button 6. Occasionally, on a random basis, there will be an ordinary nudge feature available. Occasionally also

15 there will be available the feature associated with the symbols 9. When this happens, generally at the end of a normal spin of the drums although it can be available without that, the top row of monsters is illuminated by

20 flashing lights behind the panel. This is a signal for the player to start nudging in an attempt to bring the laser symbols 13 into the windows 2 and preferably onto the combination line. He has an initial choice of which

25 way to nudge, selected by button 10 or 11, but once one of those is pressed he is committed to a particular direction. The flashing illumination transfers down each column of monsters at a different rate for each column.

30 Those that have been illuminated by the flashing light may either stay illuminated by a steady light or revert to bring unlit. The player will naturally choose to nudge the drum opposite the column down which the illumination

35 is moving fastest. If he brings the laser symbol of that drum onto the combination line this will arrest the advance of the monsters and prevent further nudging, and he can transfer to the next fastest column and so on.

40 It is, of course, possible to nudge drums simultaneously if the player is sufficiently alert. If the player fails to bring the laser symbol 13 onto the line 4 by the time the final monster has been illuminated for a short

45 period, the nudge facility for that drum is destroyed. This can be indicated by the illumination of the "nudge destroy" legend at the foot of the appropriate column and perhaps be augmented by a simulated explosion.

50 As well as the visual impact of advancing monsters, excitement can be further generated by a pulsating noise. This would start when the feature becomes available and continue as the monsters advance. Such advance may be

55 accelerated down each column, or at least over a major part of it, and the noise can be arranged to pulsate with corresponding increased frequency, either in pitch of the actual sound or in the frequency of the pulses, or

60 both. At the end of the feature the player will have achieved either a winning line or combination of symbols 13 or at least some of the columns will have been completely illuminated. A major prize is awarded if the line 4 is

completed with laser symbols, but as sub-panels 12 indicate, minor prizes are awarded if the line is not quite complete or if some laser symbols at least have appeared in the

70 windows 2. In an alternative, there are no special symbols 13 which have to be obtained on occurrence of this feature. Instead, the usual various combinations of drum symbols that generate prizes in ordinary non-feature games are

75 aimed at when this feature becomes available. The player then does not have an automatic stop on the drums as when a laser symbol 13 reaches line 4; it is a matter of his judgment

80 as to when to stop nudging a particular drum, provided of course the associated monsters are still advancing. If he obtains a normal winning combination, a prize will be awarded. With this game, there will be no 'ordinary'

85 nudge feature all nudging will be done in association with the monsters.

#### CLAIMS

1. A coin-operated or coin-freed gaming or  
90 amusement-with-prizes machine of the kind defined, wherein each drum capable of being nudged has associated therewith, on separate indicator means, a series of separately distinguishable symbols, and wherein when a particular nudge feature is randomly available the  
95 separate distinguishing of these symbols is progressed through each series, nudging of the associated drum being possible only during such progress.

100 2. A machine as claimed in claim 1, wherein the distinguishing of the symbols of the indicator means is achieved by illumination.

3. A machine as claimed in claim 2,  
105 wherein the currently distinguished symbol has flashing illumination.

4. A machine as claimed in claim 3, wherein each symbol previously distinguished in a progress has steady illumination.

110 5. A machine as claimed in any preceding claim, wherein the occurrence of said particular feature is further indicated by a pulsing tone.

6. A machine as claimed in any preceding  
115 claim, wherein each progress is at a non-uniform rate.

7. A machine as claimed in claim 6, wherein the rate increases throughout at least a substantial part of the progress.

120 8. A machine as claimed in claim 5 and claim 6 or 7, wherein the pulsing tone has a frequency related to said rate.

9. A machine as claimed in any preceding claim, wherein two or more drums have associated series on said indicator means, and wherein progress through the two or more series is not synchronised at the same rate.

10. A machine as claimed in any preceding claim, wherein a selection can be made  
130 for nudging the drums in either direction.

11. A machine as claimed in any preceding claim, wherein there are one or more special drum symbols on each drum, and only they will generate a prize on occurrence of said particular feature.
12. A machine as claimed in claim 11, wherein said special symbols generate different prizes according to the number and arrangement of such symbols finally displayed, not necessarily on the combination line.
13. A machine as claimed in claim 10 or 11, wherein progress through any one series is stopped and further nudging of the associated drum is prevented when one of the special drum symbols on that drum appears on the combination line.
14. A machine as claimed in any preceding claim, wherein a nudge feature independent of said particular feature is randomly available.
15. A machine as claimed in claim 14, wherein the particular feature takes precedence over any other feature.
16. A machine as claimed in any one of claims 1 to 10, wherein the particular feature is the sole feature offering nudging, and prizes are awarded or not according to the same principles as apply during normal or non-feature play.
17. A coin-operated or coin-free gaming or amusement-with-prizes machine substantially as hereinbefore described with reference to the accompanying drawing.